

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of the claims in the application.

Listing of Claims

1. (Currently amended) A method of connecting a mobile device to a network having associated channels, the method comprising:

scanning a selected subset of the associated channels in a predefined frequency band to create a list of potential channels carrying signals having power in excess of a predetermined threshold;

identifying channels carrying an encoded signal in the list of potential channels;
upon identifying at least one channel in the list of potential channel as carrying the encoded signal;

scanning one or more other subsets of the associated channels, which together with the selected subset of the associated channels comprise the predefined frequency band, to assemble a complete list of potential channels having a power in excess of the predetermined threshold;

analysing all of the entries identifying channels in the complete list of potential channels to identify channels carrying that carry the encoded signal; and

establishing a connection between the mobile device and the network associated with a channel carrying a strongest signal within the channels identified as carrying the encoded signal.

2. (Original) The method of claim 1, wherein the encoded signal is a GSM encoded signal and the network associated with the GSM encoded signal is a GSM network.

3. (Original) The method of claim 1, including steps of:

initialising a timer after scanning the selected subset when the step of analyzing fails to identify channels carrying the encoded signal; and
waiting until expiry of the timer before scanning a next selected subset.

4. (Currently amended) The method of claim 1, wherein a subsequently selected subset the one or more other subsets is distinct from a previously the selected subset.
5. (Currently amended) The method of claim 4, wherein the subsequently selected subset the more or more other subsets is complementary to the previously selected subset.
6. (Cancelled)
7. (Cancelled)
8. (Cancelled)
9. (Currently amended) The method of ~~claim 6~~ claim 1 wherein the step of establishing the connection includes registering the mobile device to the network with an associated encoded signal having the strongest power.
10. (Currently amended) The method of ~~claim 6~~ claim 1 wherein the step of establishing the connection includes the step of registering the mobile device for emergency service to the network with an associated encoded signal having the strongest power.
11. (Currently amended) The method of ~~claim 3~~ claim 1, wherein the selected subset of the associated channels corresponds to even numbered channels in a frequency band, and the next-selected subset one or more other subsets of the associated channels corresponds correspond to odd numbered channels in the frequency band.
12. (Currently amended) A mobile device for connecting to an accessible wireless network transmitting an encoded signal in at least one of a plurality of channels in a frequency band, the mobile device having a transceiver; comprising:
 - a transceiver for scanning channels in the frequency band;
 - a channel subset selector for selecting a subset of the channels in the frequency band and for controlling the transceiver to scan the channels in the selected subset;
 - an encoded signal detector for identifying channels scanned by the transceiver carrying an encoded signal having power in excess of a predetermined threshold;

upon the encoded signal detector identifying at least one channel in the list of potential channel as carrying the encoded signal;

the channel subset selector controlling the transceiver to scan one or more other subsets of the associated channels, which together with the selected subset of the associated channels comprise the predefined frequency band, to assemble a complete list of potential channels having a power in excess of the predetermined threshold;

the encoded signal detector identifying channels in the complete list of potential channels that carry the encoded signal; and,

a network device registrar for registering the mobile device on an accessible network associated with a channel carrying a strongest signal within the channels identified as carrying the encoded signal.

13. (Original) The mobile device of claim 12, further including a timer for initiating a delay if the encoded signal detector does not detect the encoded signal in the subset of the channels, and for instructing the channel subset selector to select a subsequent subset of the channels upon expiry of the delay.

14. (Original) The mobile device of claim 12, wherein the accessible wireless network transmits a GSM encoded signal, and the encoded signal detector is a GSM signal detector.

15. (Original) The mobile device of claim 12, wherein the encoded signal detector includes means for requesting a complementary subset of the channels when a channel carrying an encoded signal is identified.

16. (Original) The mobile device of claim 12, wherein the encoded signal detector includes means for requesting a complete subset of the channels when a channel carrying an encoded signal is identified.

17. (Currently amended) The mobile device of claim 13, wherein the timer includes means for instructing the channel selector to select the subsequent subset one or more subsets of the channels upon expiry of the delay if the encoded signal detector did not identify a channel carrying the encoded signal.

18. (original) The mobile device of claim 12, wherein the network device registrar includes means for registering the mobile device on the accessible network associated with the identified channel carrying the highest power encoded signal.
19. (previously presented) The mobile device of claim 12, wherein the network device registrar includes means for registering the mobile device on the network associated with the identified channel carrying the highest power encoded signal.